

Amendments to the Specification

Please replace the paragraph beginning at page 7, line 9, with the following rewritten paragraph:

Figure 3 is a block diagram of a suitable computing environment for implementing techniques and tools for ~~generating and/or using application identifiers~~ video image formats.

Please replace the paragraph beginning at page 12, line 12, with the following rewritten paragraph:

FOURCC codes are used to identify different video data formats. A FOURCC code is a 32-bit unsigned integer created by concatenating four ASCII characters. Typically, a FOURCC code is stored in a file (e.g., in a file header) along with video data. The FOURCC code identifies the format of the video data. The video hardware and/or software that processes the information can determine whether the video data is in a compatible format based on the FOURCC code. For example, in Figure 4 a computer system 400 for reading and processing video data takes a video data file 410 as input into a file reader 420. The file reader 420 sends video data including a FOURCC code to a video renderer 430. Typically, the video renderer 430 determines whether the video data is compatible with the system based on the FOURCC code. If it is compatible, the video data is sent to the GPU 440 for processing and subsequent display on computer display 450.

Please replace the paragraph beginning at page 17, line 11, with the following rewritten paragraph:

The combined U-V array is addressed as an array of little-endian DWORD values (i.e. a U-V pair is a DWORD). The LSW of each pair contains the U value and the MSW contains the V value. The combined U-V array has the same total stride as the array of Y samples, and there are as many lines of interleaved U-V samples as there are lines of Y samples. For example, Figure 9 shows a memory layout 900 for the P216 and P210 formats. Figure 9 shows units of memory labeled Y0, Y1, Y2, Y3 in luma array 910 and U0, V0, U1 and V1 in chroma array 920.

Please replace the paragraph beginning at page 17, line 26, with the following rewritten paragraph:

The combined U-V array is addressed as an array of little-endian WORD values (i.e. a U-V pair is a WORD) with the same total stride as the array of Y samples. The least-significant byte of each pair ("LSB") contains the U value and the most-significant byte ("MSB") contains the V value. Horizontally, there are exactly half as many interleaved U-V samples as there are Y samples. For example, Figure 10 shows a P208 memory layout 1000. Figure 10 shows units of memory labeled Y0, Y1, Y2, Y3, Y4, Y5, Y6 and Y7 in luma array 1010 and U01, V01, U23, V23, U45, V45, U67 and V67 in chroma array 1020. Each of these units of memory is a byte.

Please replace the paragraph beginning at page 22, line 13, with the following rewritten paragraph:

YUY2 and UYVY are 4:2:2 packed formats where each "macropixel" is two pixels encoded as four consecutive bytes, with chroma information down-sampled in the horizontal

direction by a factor of two. Figure 16 shows a YUY2 memory layout 1600. In Figure 16, the first byte of the “macropixel” contains the first Y sample (Y0), the second byte contains the first U sample (U01), the third byte contains the second Y sample (Y1), and the fourth byte contains the first V sample (V01). The UYVY format is the same as YUY2 except that the byte pairs are exchanged. Figure 17 shows a UYVY memory layout 1700.

Please replace the paragraph beginning at page 22, line 21, with the following rewritten paragraph:

NV12 is an 8-bit 4:2:0 format where all Y samples are found first in memory as an array of bytes with an even number of lines (possibly with a larger stride for memory alignment), followed immediately by an array of byte pairs containing interleaved U and V samples. The combined U-V array is addressed as an array of little-endian WORD values (i.e. a U-V pair is a WORD). The least significant byte of each pair (“LSB”) contains the U value and the most significant byte (“MSB”) contains the V value with the same total stride as the Y samples. There are exactly half as many lines of interleaved U-V samples as there are Y samples. Figure 18 shows an NV12 memory layout 1800. Each labeled memory unit in Figure 18 (U0, V0, etc.) is a byte. In one implementation, NV12 is a preferred format for 8-bit 4:2:0 representations.

Please replace the paragraph beginning at page 23, line 3, with the following rewritten paragraph:

NV11 is an 8-bit 4:1:1 representation where all Y samples are found first in memory as an array of bytes whose width is a multiple of four (possibly with a larger stride for memory alignment), followed immediately by an array of byte pairs containing interleaved U and V

samples. The stride must also be divisible by two. The combined U-V array is addressed as an array of little-endian WORD values (i.e. a U-V pair is a WORD). The LSB contains the U value and the MSB contains the V value with the same total stride as the Y samples. Horizontally, there are exactly one quarter as many interleaved U-V samples as there are Y samples. Figure 19 shows an NV11 memory layout 1900. Each labeled memory unit in Figure 19 (U0-3, V0-3, etc.) is a byte. In one implementation, NV11 is a preferred format for 8-bit 4:1:1 representations.